GOVERNOR'S ENERGY POLICY TASK FORCE
MEETING MINUTES

MARCH 15, 2001

IOWA UTILITIES BOARD HEARING ROOM
350 MAPLE STREET
DES MOINES, IOWA

MEETING MINUTES

This Governor's Energy Policy Task Force meeting was called to order by Chairs Dave Hurd and Lee Clancey at 12:00 p.m. on Thursday, March 15, 2001, at the Iowa Utilities Board, 350 Maple Street, Des Moines, Iowa.

MEMBERS PRESENT	MEMBERS ABSENT
David Hurd	**Howard Shapiro**
Lee Clancey	**Kevin Eekhoff**
George VanDamme	
Roger Amhof	
Joyce Mercier	
Brenda Dryer	
Lana Ross	
Don Wiley	
Lisa Davis-Cook	
Lee Kohl for Sandy Opstvedt	
John Sellers	
Kent McLaughlin	

Lee Clancey:
We will have three presentations today before we start our discussion from the subcommittees. First will be Tim Shuman from IPSCO Steel.

Tim Shuman:
Today I represent a group of companies that have one facility in southeast Iowa and others throughout the state. We have been following the proceedings of this Task Force through published minutes and sincerely appreciate the opportunity to express the group's interests.

I would like to begin by presenting some data that reflects the impact of our group within the state. The industrial group represents 10 businesses with 74 factory locations in the state of Iowa. Our total employment is approximately 10,800 full and part-time positions in the state of Iowa. The combined payroll, state taxes and community contributions of this industrial group are more than $398 million. I would like to think that all the companies are good corporate citizens and actively participate in the communities in which they reside. Combined electricity consumption of the representative group is just over 1.1 billion kWh. Combined natural gas consumption of this group in the year 2000 was 75 million therms. The total cost of these utilities was $78 million.

The industries I represent today clearly understand the goals of the Task Force which we believe to be: insuring Iowa has adequate supply of energy for the short- and long-term; provide Iowans with affordable energy in the short- and long-term; and ensuring Iowa is maximizing energy efficiency and production of renewable energy. We encourage the Task Force to consider our suggestions and concerns as you develop recommendations for the Governor and Legislature. Some of these items may reinforce some of the ideas that Task Force members have already discussed and other statements may provide new ideas and direction for the Task Force.

I would like to take a few minutes to illustrate that uncontrolled utility costs have the same impact on the industrial sector as it has on each of us as individual homeowners. Conversion costs or the cost of manufacturing for one of the representative industries normally has a cost component of 22% for natural gas and electricity. If the recent increase on natural gas prices and projected increase in electricity would be sustained for a 12-month period, the annual manufacturing costs would be increased over $33 million. Please note that industry today is very efficient and it takes a great deal of effort to trim costs and remain competitive. To put this increased cost in perspective, the total commitment by many client committees to review and implement programs reducing costs in areas of energy consumption, raw materials, man power and services only produced a savings of $5 million for the year 2000. No fuel adjustment charges are available for industries on goods sold. It would take more than 6 years to recover such an abrupt change in basic utility costs. Our group would hope that the results and recommendations of this Task Force would provide stability in long-term prices of natural gas and electricity, in addition to providing a competitive environment that has the ability to reduce prices and not just control prices. The consumer must have alternative sources before pricing is negotiable.

Provide a level of reliability in Iowa electrical generation delivery systems that has the ability to deliver a near zero interruption of service for all users. I have two comments that the industry in the eastern Iowa sector presently enjoys this type of service and hopes it will continue. Provide electrical transmission and generation capacity great enough to allow buy-through options for interruptible industrial contracts. These are the types of programs industrial customers and other regions of the country are able to participate. Provide fuel diversity within the generation plan that ensures competitive pricing and promotes construction of new generating facilities. Provide targeted energy efficiency programs with each rate class planning its own specific program. Cycled air conditioning, water heaters and other demand side management programs are an environmentally friendly way to better efficiency. Many programs like these are routinely practiced by industries to control costs.

Placing the state of Iowa into the generating business might be considered as an option for the short-term. Private businesses have resisted this option for themselves because they do not have the expertise to operate generating stations and there is no return on investment on this outside of their own consumption to make this attractive. Generation sites established by the state could later be sold to private investors. We believe that the environmental approval process for generating units and transmission lines needs to be realistic and timely. The Task Force may ask the existing utility providers to be personally involved in the process of studies, plans and economic development. The process of developing and evaluating inquiries to gain data is a long process that may not provide the technical level of information required for informed decision making and certainly they are not time critical.

Renewable sources of energy are 10 to 20 years away from reliably supporting critical loads. Industry agrees that renewable energy sources need to be a priority in the development perspective, however, they may not be the solution in short-term. Reliability in industry is as important as it is in a hospital. If you are connected to life support powered by wind or solar energy, a calm, cloudy day is not your friend. Similarly, unreliable energy resources can make many industrial operations very dangerous.

Priority or free grid access for renewable energy sources may not be fair trade when trying to develop a competitive market. Plans to eliminate subsidies for all sources of energy might be considered. Renewable energy must not be a synonym for subsidized energy. It must be efficient, reliable, environmentally friendly and affordable. Unbundled utility charges would be preferred. Individual customers have the right to know what all costs are. There is a need to provide for low-income and fixed income families in times of crisis. Please recognize that imports, negative pricing and recession dramatically affect businesses. Business generates taxpayers. Excessive energy taxation on many Iowa products in the market to fund programs and subsidize inefficient or unreliable energy programs create an unfair burden on Iowa businesses. Other state producers are not encumbered by such taxes. The inability to pass these costs along as higher prices will make Iowans less competitive in the regional and international market places.

Our industrial group recommends the formation of a technical committee to develop a distribution plan for appropriate generation sites. A sound technical plan is required to move forward. Given the timing forecast of energy shortages in Iowa, the technical issues of

providing reliable economic energy cannot be overshadowed by social and environmental issues, which may not exist if the correct technical solution is developed. The strategic and controlled placement of a dependable source of generation is an important element to future reliability for all customers. If shortages are on the horizon then achieving a reliable and sustainable supply of electricity in Iowa will require new generating resources to be built. The cost of generation and transmission is an important factor for the technical committee to include in the analysis. There are practical limits to how far electrical energy can be transmitted which must be considered. Knowing what type of power that can satisfy the needs of a specific area is critical. The state of Iowa must provide the technical committee with very specific information on economic growth. Where will the largest growth occur? How much growth is expected? Over what period of time will this growth occur? Affordable energy for Iowa agricultural and industrial base is essential in creating and retaining jobs for Iowa citizens. As we have seen in California, insufficient energy and high energy prices have lowered production, put people out of work and severely affected residential utility bills. Who else can be recruited to provide technical answers and direction? The policies and plan recommended by this Task Force should intend to include the required technical expertise as it relates to generation planning, transmission planning, siting, economic and environmental effects that will result. Others than the technical committee must resolve grid access and net billing issues. We feel that these are more legislative issues than technical issues.

In the decisions that this Task Force will make we ask that each of you bear in mind that the competitive natural gas and electrical rates must be available to retain the existing industry and provide an environment for future expansion. In addition, these rates must be available to attract new industry. Utility reliability and industrial strength are important to national security. The state of Iowa might consider promoting a national initiative for developing a balanced fuel supply program for generation of electricity. Please note that the siting of interstate highway systems and natural gas pipelines are federally regulated. A federal initiative may also be necessary for electrical distribution system. In conclusion, this industrial group is supportive of the Governor's efforts to establish an Iowa energy policy. Many of the representative companies have been involved in similar efforts in other states. We do appreciate the opportunity to provide these comments to the Task Force. This group would also like to offer future assistance to this Task Force, subcommittees and other Iowa leaders to help resolve this serious issue.

David Hurd:
Thank you. Are there any questions from the Task Force?

You gave an example of your manufacturing costs going up $33 million because of energy costs. Is this because of the increase in natural gas prices or an assumed increase of a certain amount?

Tim Shuman:
That is the potential cost if the increase in prices would have been maintained. Natural gas tripled over a short period of time. If those increases would have been maintained for a 12 month period, and we would have seen a projected 10-15% increase in electrical charges that were also projected because of those natural gas price increases.

David Hurd:
That would give a $33 million annual increase in manufacturing costs.

You also said that in your work through the year 2000 you were only able to knock $5 million off that through additional energy efficiency and load management.

Tim Shuman:
It is an ongoing process within the industry to have cost reduction opportunities in various areas. It is very difficult over a year's period of time to accumulate large dollar volumes. That would be the contribution for a good year's effort.

Lee Clancey:
Could you explain to me what buy through options are?

Tim Shuman:
It is the ability of an industrial customer, when in an energy curtailment situation, to buy energy at a much higher price in order to continue to operate. It is almost like a penalty price. There are situations in certain industries that you can buy through for a certain period of time in order to be able to get your equipment in a better situation to more safely shut down.

Lisa Davis-Cook:
In terms of your group's attitude towards renewables, it has here that you think that they are 10-20 years away from being feasible for Iowa. Why?

Tim Shuman:
They are not 10-20 years from being feasible. To be truly reliable for an industrial situation you can take the same analogy I used with the hospital. When you have crane lifts and 160 tons of molten steel or in some cases, you have certain equipment in other industries that cannot afford to be up and down and bend all the time. Although you have back-up systems in place, the switching time can put you in a very unsafe condition at some points in time. If you only experience an interruption of power, in either gas or electricity, once or twice a year you consider yourself lucky, but to continue to do that makes the environment very unsafe.

Lisa Davis-Cook:
You can have interruptions in power from coal plants too. It is not only renewables that can interrupt power.

Tim Shuman:
Yes, there are many types of situations that can cause power interruptions. With renewables, it is the fact that when the wind isn't blowing that day we wouldn't manufacture that day. That is our concern.

Lana Ross:
I have a question on your statement; provide targeted energy efficiency programs with each rate class funding its own specific program. Give me an example of what you mean by that.

Tim Shuman:
We are talking about the individual consumer versus industry. Any program that the individual consumer or residential customer may have, they should fund those areas and any taxes that go to these should fund whatever types of programs they have.

Lee Kohl:
Would you carry that through to say; when an electrical sub-station is being built to mainly serve the industrial customer, that industrial customer should pay the cost of that electrical sub-station rather than having that spread among the general community? That is how part of our grid system is put together and developed. It is more driven by the industrial consumers than it is by the residential consumer. Would it be fair that if you were going to shift that cost on to those people who created it, you would also shift those costs on to the industrial customer?

Tim Shuman:
It depends on the specific instance. Are you growing existing industry or are you trying bring in new industry? How many jobs does it create? What are the benefits for the general public?

Lee Kohl:
You are looking at weighing out societal benefits in that circumstance.

Tim Shuman:
Yes.

John Sellers:
How do you suggest we bring renewables in to where they are able to support critical loads if we put enough barriers in against them now. Just because we can't see it today, shouldn't they stay in the mix as we try to move forward rather than dismissing them because they are not reliable today?

Tim Shuman:
We don't need to dismiss them. Our industries would like to see the development of these programs continue. They are necessary. There will be technology developed to make them more reliable. I guess that is why our group looked at it and decided to demand that in 10 years we might be 30% supplied by renewables in a reliable fashion. Get all the technology and resources in this country together to focus on this issue.

Lee Kohl:
Do you think it would be safe to say that for large industrial customers that reliability of the system is becoming more important in terms of the effect that is has on your business operations?

Tim Shuman:
Sure. With the high technology that most of us employ, a small fluctuation can take our equipment off line. It can take the equipment off line in a precarious situation. It can take many hours to recover from that. A lot of those situations will never go away. There are no forms of backup that I can see in the foreseeable future that will resolve that. If we can all avoid it from the source itself, we would like to have that.

Lee Kohl:
Do many of the groups you are representing today, being large industrial users, employ individuals that deal solely with these type of circumstance of power quality, back up systems and those type of issues?

Tim Shuman:
Yes we do.

Lee Clancey:
We will now hear from Lee Kohl with the International Brotherhood of Electrical Workers, Iowa State Conference.

Lee Kohl:
I have given you a list of brief topics I will be talking about with three bulleted recommendations. I tried to keep my recommendations to a very broad perspective. I would like to let you know a little about the organization I represent. In 1891 eleven men got together, not because they were not paid well or not because there was not enough work, but because there was a 50% mortality rate on the job. There was an average of 7 years life expectancy on the job. Half of the workers in the industry would die. They decided that a union had to be formed. On that day, Henry Miller and 10 other individuals formed the International Brotherhood of Electrical Workers (IBEW) to try and address safety issues. Henry went from community to community organizing linemen that worked in the electrical industry, trying to raise safety standards and safety issues. After several years or organizing, he went back to the job and lost his life there. One hundred ten years later in this country, we still bury a lineman every 10 days. For 109 years in this industry the loss of life decreased. Last year we hit a level plane, but by some statistics death rates rose in our industry. The industry changed dramatically because it initially was an open market industry. It was an unregulated organization with a variety of companies. A provision of Acts was passed across this country with utility withholding acts and so forth, which created regulation because a deregulated system was not working. A variety of economists point to this market as one of the reasons that we went into the great depression. Utility regulation came along and regulated the electric industry. The possibility of retail competition came forward. We passed measures that would open natural gas and wholesale electricity to wholesale markets. At that

time, the IBEW recommended we take this process very slowly. We had been involved in the industry and had seen the safety problems and market manipulations previously and we were afraid we were going down that same path.

Between 1993 and now, we have lost 29% of our workforce nationally. With the mergers and acquisitions that have happened, you can reasonably think that because they have come together, they would find more efficient ways to do their jobs, and so a certain number of employees would be laid off. Yet, they are serving a larger customer load than they were in 1993 yet they are doing it with 29% less workers. In some states we have had as high as 49% lost workers. The industry was preparing for a deregulated market. The industry was finding every possible way to become streamlined. Companies who had been guaranteed a regular rate of return now had to find ways to be cash rich. They had to prevent other companies from taking them over or put themselves into a position to take over other companies. To do this they had to have cash. One of the easiest ways for them to get cash was to cut the workers, service and reliability of their systems. Nowhere was it more apparent then recently in Chicago with Edison. Edison had some severe cash flow problems. They let the infrastructure of their distribution system fall apart. Their service and reliability, for those reasons, fell apart so they could maintain their cash flow. This is just the business we are in and the way the business responded to the change in those markets. We came into the deregulation battle here in Iowa. We saw that there was not a true developed market and that the market environment that was there was not going to serve all customer classes. On top of this, nowhere in the country have we ever adequately set up a series of regulations or standards for outages, staffing, response time and worker safety. These standards are ambiguous and float out there in the industry with various agencies having some review over them but very little understanding of the industry. If you were to read the OSHA standards as they respond to the electrical industry, they will tell you that a worker cannot work in proximity of a live energy field. Our workers have to work in the proximity of a live energy field. Some construction companies in the state have been fined for workers working in proximity of energy fields. These are the kinds of situations that we deal with from the front line soldiers of this business. All of us have businesses that we work for probably feel a certain sense of loyalty or respect from the industry we draw our paycheck from. I would suggest that the electrical workers take it a little more seriously than most folks because of the potential loss of life. We have a view of this business that many other don't have. We see that the basic principles of electricity are not being served or taken care of. They go directly to the reliability of the system. The system has not been guided through engineering other than the attempt to try and provide the electricity at the least possible cost, which is not the best possible way. This new standard has been created because of these market forces. We used to do routine maintenance or line clearance but now the industry has gone for a fix-it-when-it-breaks attitude because that is what can be afforded.

I want to give you a brief perspective of what we experienced in California. I have a videotape that I would like to provide for the Task Force members that IBEW produced in 1996 called Power Switch. This was on the line of the California change. They showed what was happening with outages and outage durations in California and the loss of utility workers there and what impact it was having out there. A short-term outage then would have been 3 hours; long-term would be 24-26 hours. Within a year, that short-term outage went to 26-28 hour

range, long-term was in the 3-day range. This occurred in a period of about 6 months. The utility companies came before the California Energy Commission in 1995 and was asked if new generation needed to be built. The utilities told them they could buy all the power they needed off of the spot market. That is the major reason, not siting rules, that generation was not built in California. Today, 1/3 of the active plants in California are idle. As studies have shown by controlling 5% of a power market, you can control the price of that power market. These markets are not functioning free markets. This is the problem by saying you are going to get market benefits from a deregulated electricity market because it does not exist. All the traditional supply and demand aspects of that market that need to be there do not exist. A grid system that you could trade upon does not exist. Adequate generation and suppliers do not exist. You cannot hope to simply create them overnight. If you ever want deregulation to have a chance of working, the transmission system needs to be planned and put together, but that planning currently does not exist. As the situation worsened in California, they laid off more and more workers. There was one small provision in the California legislation, which provided them the ability in a crisis to order re-manning. It was rather pioneering in that legislation. The California Commission did just that. They ordered 3,800 workers back on the job. Unfortunately, other regulated states in the area are suffering price problems from that wholesale market. The first thing that happens to them is that those utilities lose money. The utilities then turn around and lay off workers. We have seen layoffs in Oregon, Washington, Nevada and Arizona in the past 4 months. There is legislation pending in 3 out of 4 of those states to provide their commissions with the same power to order their utilities to re-man. Taking care of the system and customers that it serves should be the primary concern of those utility companies, especially when they are serving the public interest under a rate-regulated environment. This is the problem with power markets in general. They do not fit into general market type of environments. You cannot store it, stack it and you cannot build up excesses. When there is a shortfall, as there will be in most markets, you will be left without power. We do not believe that a vital utility like energy should be placed in the hands of market forces. If you are going to place it in the hands of market forces, you need to do it in a way that preserves the ability for that market to function.

Where do we go from here? I would say that power at a cheap price does not mean anything if you cannot get it. If you cannot have reliable electricity, what is the purpose? We have to create standards to make sure that the system is functioning and growing correctly so it has the potential to do the kind of things that society and industry want from it.

To do that we have come up with three very basic and broad based recommendations. We think there should be a comprehensive evaluation, planning and upgrade of the transmission and distribution grid. This should include a state, regional and national effort accompanied with strong rules governing outages, outage duration, strategic staff, future planning needs, maintenance standards, line clearance and power quality standards with an annual review to know that the industry is moving forward in this way.

I would like to say something about power quality and this is very key. Unless you are in the major industrial business, we do not do power quality measurements here in the state of Iowa as a regular functioning part of the industry. Some of the utilities might actually do some power quality studies. I am sure that some of the big industrial customers do some power

quality studies. Power quality in the power curve that is there can take 10-30% of the life of an electronically functioning device. Starting with the light bulbs, computers, televisions and high tech industrial equipment that runs our industrial society. What kind of savings would you be needing to get on your electricity to offset the cost of a 30% failure in an electronic piece of equipment? Those are costs the industries amortize over a long period of time. If they cannot be guaranteed that those pieces of equipment will function at its life expectancy, that they are losing power quality, what do the savings of electricity costs really mean? It is key that we understand how important reliability is. We do a lot of things with our grid system, and the way it developed, to simply accommodate whatever kind of growth occurred in our communities rather than planning for how our communities are going to grow in the future.

The same thing has been done with energy resources. Right now because there is a crisis and prices have gone up, we have begun to focus on ways we should do something to be a little more sensible or logical about how we move forward with these things. This is our opportunity to start planning the future of our society from the electrical perspective.

The incentives that ensure a mix of generation sources with consideration of future effect on cost, quality and environmental impact. We suggest that you err on the side of too much reserve margin rather than too little. Support realistic uses for renewables but recognize that fossil fuels are going to be the main base load source for the future. We support cleaning up coal plants and using clean coal technologies. One of the ways we support cleaning up coal plants is that when you go through the plants to retrofit for clean coal technology and cleaning them up, you have an excellent opportunity to look at some alternative feed ins and some biomass and co-firing possibilities. You are going to take your base load, lowest cost energy option and have a chance, since you are retrofitting them anyway, to spend a little extra money and provide for them a long-term renewable continued co-firing system. You have all heard about the switchgrass project and have heard the problems in dealing with transportation. Obviously, the key in developing this kind of technology is being able to have small, regional type of support system for each plant. You are not going to get one plant or two plants that burn 20% or 30% right off the bat if you do not slowly develop out that type of system around the individual structures you already have in place. You could then have a true opportunity to develop that technology at the lowest possible cost and still be able to move forward with the technology.

Before you subject the welfare of society to severe risks of market economies as it relates to energy you create an environment that ensures the basic needs of both the society and market that do exist. You cannot have a deregulated market unless you have everything in place that makes a market work. The one thing I would like to point out is that all markets are still a zero sum gain. At some point in time, no matter how good your market is, and how good you develop it, it will still move its way back toward a monopoly. That is what markets do. If that is what you want to have happen with your energy accept that, but if you don't, then look at whether it is something you want to subject to a market. Be realistic about what markets really do and how they apply themselves to energy. We do not believe that a vital commodity like energy should be subjected to market failures. We don't think that is the best way for society to move forward, but if it is going to move forward, put the basic type of protections in place to make sure that the fundamentals of reliability are there so that the system works.

David Hurd:
Could you list what those basic protections that have to be in place in order for this to move forward into the market?

Lee Kohl:
Understand that right now in this state we are moving forward with a reliability docket. I believe there is some opportunity through that docket to set some basic rules. The kind of rules we have been talking about are rules that deal with specific safety as it relates to this industry. Safety in this industry is different than safety in other industries so you need certain types and sets of rules. There are things that are happening in the business that are being business driven that we believe are potentially dangerous to both the public and workers involved. It used to be that you would never send a utility crew out with less than four people. The reason is that because when you are up on a pole and going through disconnecting live power, there are two people working and then there has to be at least 1 person who does nothing but watch and call it out by the numbers. Making sure that nobody makes a mis-step. To make sure that no one is working on or being fed back live power. This is how people die. That is why it is important that kind of safety is enhanced.

We think that outage times and durations can be used as a measure of reliability. Ninety percent of outages are weather and nature related. For the 110 years we have been in this industry, weather and terrain has been there as well. We have always had to deal with weather and terrain and we should prepare to have crews available for weather and terrain. We should have standards to deal with this, and how long an outage should be. We also look at staffing needs. In 1994 there was probably no place in Iowa that a utility truck was not 5 miles from, now there are places that a utility truck isn't 40 miles from. It is those kind of things we are talking about when we talk about outage and outage durations, strategic staffing, maintenance standards and line clearance. There was a provision in the deregulation bill that dealt with this. Many of these rules would have come about through that process but one of the things in the bill that always amused me was a section saying if it is a maintenance outage you would be penalized, if it was a natural outage you would not be. If you do not trim a tree and it blows down on a line is that a maintenance outage or a weather related outage? If you don't cover a base of the pole with metal so an animal cannot climb up it, is that a maintenance outage or is it a nature related outage?

There are a lot of things we can do in this industry to make it better and safer. Power quality studies and standards for how you do maintenance are a few. I am the first person that would recognize that the industry is changing. Technology is in flux. There are going to be natural savings, time savings, and personnel savings created by that technology. That is not what I am talking about. What I am talking about is the nuts and bolts work that has gone away because we have allowed it to happen in this country. We have allowed our utility companies to become too streamlined. I do not blame the utility companies. That is their job. In the situations of RECs and municipals, they serve their customer's base. Our job as policy makers in the state is to decide what social benefits we are going to have from this.

Roger Amhof:

From the perspective of the worker, when you become more reliant on distributed generation, fuels cells and solar cells how do you truly know that you are in control of that circuit if you do pull a fuse somewhere or you don't know what other electricity might be feeding into the line?

Lee Kohl:
You have to know, first of all. Distributed generation brings on two distinct possibilities. One is that is could make the grid much more responsive. It also places new strains so there have to be rules in place for how these interconnects are set up. We argued this hard during the deregulation battle. That had to be one of the most over-engineered parts of how we are going to go forward. We see that very same thing on the horizon. We do see much more small or distributed generation. We have seen when getting into our transmission problems that managing the flow of electrons is a difficult business that is going to get nothing but more difficult. Unless more emphasis is put to it, you are going to have failures if you don't do it right. Are we every going to get away from the grid entirely even if all of us could have individual units in our homes that would generate electricity? I think societally we have decided that we want power.

David Hurd:
Thanks Lee, now we will hear from David Osterberg.

David Osterberg:
I may be going through some of the same stuff you have gone through already, but I hope I will put a different spin on them. We have alluded to what has dominated the discussion over the last 5 years is deregulation. Separating production from transportation and distribution. It is still an issue today but it is interesting how that has changed in only 1 year. California's failure and real problems in places like Montana have changed what people are saying about deregulation now. A year ago no one would have said demolish the system we have now. I think there is a fair chance that we will not be deregulating electricity throughout the United States because it has been shown to be not that good of an idea. We are finding more evidence of that all the time. Yet the assumptions continue to be that. Most people who are making decisions on that continue to assume that we are going to deregulate. I have an article taken out of the Des Moines Register of March 7. In the article, Mark Douglas is making some assumptions here when he is talking about what needs to happen in energy policy in the state of Iowa. He states that one of the reasons we don't have more generating capacity here in Iowa is the lack of a clear, consistent time table for the transition to wholesale, retail, generation competition. If we are not actually going to be deregulating, this is a bad assumption to make. He also says many things about the environment. According to the article, Iowa should change its rate regulation to be more market driven and to be more controlled by the states electric utilities than by any regulators. He goes on to say that the environmental protection we offer in this state is disconnected from energy and economic development policy; that it is nice to be environmental but our environment is costing us in terms of having a consistent policy to bring in new jobs. He concludes saying there is a proposal in the legislature to do these things and we can only hope that the policy makers are listening. I thought you guys were part of the policy makers and maybe he is speaking to you, but I think he is only speaking to the legislature. This article makes the assumptions that you

continually see that we are going to deregulate and there is no question about it. It is also consistent with what we saw last year when the deregulation battle was being debated.

There was an article stating MidAmerican Energy plans to build two electric generation plants in Iowa if the legislature agrees to deregulate the industry. Quid pro quo, if you don't deregulate you don't get any more power. I think that as long as everybody was positive we were going to be deregulating everything, that might not be a wrong assumption for the utilities to make, but I'm not sure I believe we are going to see deregulation.

This is from the Department of Energy web site. It comes out weekly. It is called the Electric Utility Restructuring Weekly Update. This is a consistent source of newspaper articles. These are the headlines that have come out in this site in the last three weeks. Montana Resources asks Governor for Regulations. Montana Resources has the Butte Montana Copper Smelter. They are one of the biggest employers in the state. They have went to the legislature to say this, "we were wrong to support deregulation a few years ago, please regulate it again". New Mexico Governor Approves Delay in Deregulation. That is a delay until 2007. New Mexico is seeing what has happened in California and saying that they cannot afford deregulation. Prospects for deregulation in Wisconsin could be dead. This is very interesting because it is a utility along with an environmental group saying that what we were talking about before with deregulation is now a bad idea, we do not want to deregulate. Idaho has gone so far as to pass a law stating that you can't deregulate in Idaho. This is all just within the last 3 weeks. I would not want to make the assumption that deregulation is inevitable. I think it is now in doubt and you should be treating it like that. Why is it happening? Why would the Virginia furniture manufacturers be interested in deregulation? I read this article in the Great Falls Tribune stating that state industries bemoan the jump in power prices. What we saw was that industries were seeing three fold increases in their energy bills. These were not small companies where they did not have anyone on staff who was knowledgeable about this and inadvertently got caught. These are larger companies that have said they can continue operating right now but the jump in prices is wiping out months of savings for the cost cutting efforts made at the plants. This is what you can run into when you decide that deregulation is the best idea you have ever heard. One last news article from the Wall Street Journal which is to look at not just California but states where they are selling power to California. A lot of folks in the Northwest are doing that. This article talks about those companies that are doing really well because California is doing so badly. They are the ones that are selling power to the people in California. What you find is that Oregon Portland General Electric which is about to increase rates for customers about 17% because natural gas prices have gone up, rescinded that rate increase. And, because they are still regulated that commission is going to come in later this year and probably give back to the customers money because their company has made so much money selling power. You can do that because you have a regulated industry. If it were deregulated, customers would have nothing. They would not see that benefit. BC is a state owned company that gave back about $130 to every single one of their customers because they are regulated. That is an example of regulation in the first case, and in the second case, a municipal or REC ownership in which the customers are the actual beneficiaries instead of just the stock holders if you maintain some kind of regulation.

In 1995, the Intergovernmental Panel on Climate Change came out with an article which suggested that the balance of evidence suggests a discernable human influence in global climate. That we were seeing when the research was done that we could see the human imprint on the heating of the earth by a 1 degree Fahrenheit increase over 100 years. They are now coming out with a new report. The last one said we could expect about 3.5 degree in Fahrenheit increase in temperature worldwide in about 100 years. They have now come out with their third assessment report, which now says that the first report was probably wrong and it is going to be worse than expected. It has changed from saying maybe to probably and we should be doing something about this. The numbers now project as much as a 10.5 degree Fahrenheit increase. I need to remind you that the last time it was 9 degrees colder there was a ½ mile high glacier sitting over Ames. That's what 10 degrees means. It is an incredible amount of heating. If we continue to do the things we are already doing and not learn from the past we will probably have that. It is coming very quickly. We are going to have more extreme changes in weather patterns. You will see diseases reappearing because of these climate changes. Those kinds of changes are happening. The policy is following them. I need to refer only to the fact the Ford, Chrysler, British Petroleum, Texaco and Royal Dutch Shell left a coalition of people trying to say that the Kyoto protocol was the worst thing in the world. The coalition has gone as far as to make sure they are never going to have the embarrassment of another company leaving them because no one can be a member. It is only associations like the Edison Electric Institute that belong to the Global Climate Coalition. Some of the companies that left the coalition have gone to another group of companies that say Kyoto is the first step and we must go further. That is what is happening in policy, Europe and the United States. The Bush administration has not been good on this issue in general but we are seeing great things coming out of the Bush administration. Christie Todd Whitman saying that global warming is real. If Dick Cheney had not changed his mind last week maybe even the United States would be moving toward carbon dioxide changes now. We are going to get there. There is no way we cannot get there giving how fast global warming is happening.

Now we can talk about what we know about other ways of providing us services of power. If you are going to build more power plants. When you look at power plants, you need to look at how stable is the source of energy you are using. This is the natural gas prices over the past two years. Running around at about $2.5 per million BTUs. When MidAmerican was thinking about a 3.5 cent per kWh charge from wind farms in the northern part of the state were too high because they could build a natural gas plant at 3 cents. The prices are now in the $4-5 area, which means wind is cheaper than natural gas for a new power plant. Whatever the source is you don't want to take those chances. Coal is solidly low, when you are looking at $1 per million BTUs, and has been there for years. You still want to have some diversity. Some coal, natural gas, biomass and wind. You also have to think about energy efficiency. What we have seen is that some people coming back to this belief. One of those is Governor Pataki of New York. He could not wait to get rid of all that stuff they were being charged extra for so they could have a little energy efficiency. He has now doubled the amount of money being spent on energy efficiency. He came in 1994 and made some bad choices and now he is coming back and making some better ones.

The Western Governor's Association made multiple points as to what they were going to do to make sure they would not have problems this summer. Many of them had to do with what the

government should do, repowering of old power plants and cleaning up of those old plants. As Lee Kohl stated earlier, this is a great time to refurbish them to do some co-firing projects.

I would like to talk a little about what should be a part of policy today. One of those is distributed power. The reason that the Western Governor's Association gives for not having more distributed generation is that utilities have frequently blocked the installation of such technologies through cumbersome business practices or complex and inconsistent requirements for connecting such generation to the transmission grid. Then they make requirements to ensure safety and reliability of the grid should remain in place. You have to recognize that distributed power is one of the ways out of this situation but the utilities have not been very good at allowing that to happen.

The fastest way to bring on anything is to do energy efficiency. You can do it in a few months. If you are going to build any kind of a power plant it is going to take a much longer time. This is not because of regulation. Regulation does not turn out to be that bad after all. If you plan for it, and you know what you are going to do, you won't have the problems that California has had.

What can the Task Force do? Governor Pataki and the Western Governor's Association are making real energy policy. You should look at the kind of stuff they have decided to do and think about it. It is energy efficiency, renewables and distributed power. All of those things should be a part of what we do. Right now, as you are meeting in this room, the utilities are up at the Capitol trying to change some of this stuff. If we are talking about energy policy, the utilities are changing what the energy policy possibilities are going to be for this group because they are pushing a bill that is going to take away a lot of the things you would normally be doing. If you are going to be talking about transmission and new production, the utilities are doing it right now in their version of the bill.

The last thing I would say is that I realize you are thinking about what the energy policy should be in this state for the long-term. It is hard to do that when somebody is cutting your legs out from under you. Even though you are past the time to make short-term recommendations, I think you need to make a short-term recommendation that says; if you bring on new power plants, we need to have a renewable portfolio standard. The Governor came out last year saying 8% by 2011, which I thought was pretty ambitious. It is possible to do that. If you are going to be passing this legislation, a renewable portfolio standard ought to be a part of it. The rest ought to be energy efficiency. There has to be some energy efficiency simply because it is the fastest way to take care of these problems. There is nothing better or cheaper than doing energy efficiency at the same time you are thinking about bringing on new power plants.

Lisa Davis-Cook:
I have a question about the siting legislation they are looking at up at the Capitol right now. What requirements are they taking away from the siting and what are the environmental impacts of that?

David Osterberg:

It all depends on what comes out of all that in the end. The version that I have of House File 577 does not take out energy efficiency every place it is in the Code but it really changes the policy to something that places more emphasis on economic development. This is a part of the Code that has been talking about taking the long road, check on everything else you can do before you build a power plant. All that goes out and says that electric energy policy and economic development policy are the things we ought to worry about; then along the side it says, as long as it doesn't mess up the environment too much. That is why I think it is a very bad thing for the environment.

Lee Clancey:
Any other questions? Thank you for being here David.

David Hurd:
The Task Force will be given a copy of the bill being referred to during these presentations. We have been told the bill has a lot of technical matters in it. In about a week we will get an explanation of the bill from our supporting staff to assist our reading of it. At our April 3 meeting we will have Allan Thoms and Brent Gale reporting to us on it, explain where it stands, what it means and where it is going. That is the plan for getting us up to speed on this generation and siting issue.

Lana Ross:
I hope it is not over by then. It seems very likely that it will be done by then.

Lee Clancey:
It is likely that it may be through the House. I don't know that it will be through the Senate.

Lee Kohl:
It won't be through the Senate. It could be through the House.

I would like to make a recommendation that along with Allan Thoms and Brent Gale that you would also have Gary Stewart from the Consumer Advocates Office come and give a different perspective to at least get multiple points of view.

Lee Clancey:
OK, Sharon will take care of seeing if we can get all three of those people to speak at the next meeting.

David Hurd and I met with Joan Conrad earlier today about this legislation. I had some feeling of frustration that this bill is more comprehensive than what we were lead to believe. It gave me pause as to what the purpose of this Task Force is. I do not want this Task Force to be a reactive group to the bills being brought up at the Capitol. I think we need to take a look at the bill and see if there is something we do need to react to. Whether it is something that has been omitted or something that is in it that we do not believe is in the best interest of the state. We need to keep our focus on the long-term best interest of the state with regard to the development of a comprehensive energy policy. It was one of the things I was concerned about at the beginning of this Task Force is that we didn't have any legislative representation here. We should have probably had that representation here. All the other Task Forces that have been appointed have had legislative representation, but we don't. We need to keep moving forward and keep in mind that we are in this to look at the long-term. We had the opportunity to put short-term recommendations out there and we can do that again with regard to this legislation but our goal is to come up with recommendations for long-term energy policy for the state of Iowa.

George VanDamme:
I have a copy of the bill from the Senate side which I believe is about energy policy. I haven't read it yet.

Lana Ross:
I think what is hard is that some of the legislation being introduced has a long-term affect. That is why there is such an interest in it. If it were the short-term there wouldn't be as much interest. But, it is long-term and it does affect us.

Lee Clancey:
It is also comprehensive. At the beginning of the legislative session, my understanding was that it was going to be dealing with specific issues, like siting. The fact that it is much more comprehensive than that is a frustration and concern to me. We will get some information for next time and in the meantime we will get some sort of an executive summary type of analysis of the bill as it currently stands from our support staff so that we can start thinking about what our reaction might be to this particular piece of legislation.

Let's go into our subcommittee reports. We will begin with the Increasing Supply & Capacity subcommittee.

David Hurd:
Our subcommittee members are in essential agreement on a number of broad policy statements. We are at the point where we are going to start to try to add some detail to those policy points. I am hopeful that our subcommittee will be able to bring to you at the next meeting the proposed policy blanks for your approval. This would give us the first step to go to

the Governor and say here are some of the things we are thinking about. Some of the other subcommittee may be near to this same point.

A base statement is that the policy in Iowa is to be an adequate supply of electricity for all users in the state. Secondly, in general we want to see electricity used in Iowa be generated in Iowa. That is not to negate the idea that we need to work regionally. We ought to be working on issues such as bringing power in from other states. As a general policy, we want to move toward generating in Iowa what we use in Iowa. Third, diversification should be a policy for developing more supply. We want to develop different kinds. Fourth, energy efficiency would be our first preference for source of future supply. Fifth, renewable power should be a significant source of additional capacity and we should set targets. Sixth, distributed generation should be a meaningful source of additional capacity in that it diminishes transmission needs. This one we might have a little lower priority than the ones previously mentioned. Seventh, while we expect a broad mix of energy sources and alternatives will be the basis of the energy supply in Iowa, we expect that coal will be a significant resource for electric generation for many years to come. Our policy should be that electric generation using coal should be accomplished while minimizing adverse effects of environmental quality to the extent economically feasible. To that end we will explore contractual arrangements, state guarantees and incentives that would result in bringing old coal-fired plants up to modern environmental standards and ensuring that new coal fire plants utilize state-of-the-art technology and adhere to stringent environmental standards. Eighth, a very general statement to put into place a broad array of incentives that tend to pay for themselves over a period of time to incent all the previous behaviors we just talked about. Ninth, we do want to set targets. Tenth, our policy is not to further impair the environment but to improve it. Eleventh, it shall be the policy of the state to direct or encourage the science and engineering communities of the state supported colleges and universities to expend fiscal and intellectual resources to explore and develop value-added biopolymers and other bio-products that together with crop residues have both financially viable materials and energy value. This is the point George VanDamme talks about making use of the direct product being grown but also using the residues.

I think we will be back in here April 3 with a proposal for the Task Force.

Lisa Davis-Cook:
I would like to add that we are going to talk about the incentives and goals. David, George and I talked about mandatory versus discretionary in terms of the goals.

David Hurd:
Some of the other subcommittees are already working on a goal or target for some aspects of their work and we wouldn't get into that.

Lee Kohl:
On your last point of crop residues and biomass, are you relying on some of the groundwork that that has been done?

George VanDamme:

This is actually using bio-products to make materials and energy. Iowa State University chemical engineering department has done some proposals to the Department of Energy for doing this.

Lee Kohl:
Like soy diesel?

George VanDamme:
When I say biopolymers I am talking about biodegradable plastics. If the state is interested in moving into the higher tech stuff, we need to put some resources into that. It is also fits into value-added agricultural initiatives that the Governor wants to do.

Lee Kohl:
I am totally supportive of this, I just want to make sure I am getting a clear picture of it. You are talking about something that would be a subsidized-driven situation because the market would not really drive this normally.

George VanDamme:
No, I am just trying to get the state to put the education resources to it. It can be just looking for federal money to do it. This is a longer-term option. It also fits in a less technical sense of using the full crop. Using the corn for the grain and the corn stover for the fuel.

John Sellers:
As it evolves pretty soon the corn for grain will be its lowest value. You will be taking a lot of the derivatives out of the corn that will be making the value-added chemicals. Feed or ethanol value out of that corn will be the lowest economic value in a few years. The big companies are already working with universities and federal government to do this now. What you are thinking there is right on track.

George VanDamme:
We would like to get into the program to help find uses for this stuff. It is in our and our customer's best interest to do this.

Lee Clancey:
We will now go on to the Energy Efficiency subcommittee.

Roger Amhof:
What we have done is put some of the thoughts together that we talked about last time. We first have the broad statements of fact about efficiency and demand. I think we are in agreement that energy efficiency can certainly reduce demand and delay the need for additional generation to some extent. The delay of additional generation then reduces the need for additional transmission and distribution. We say the same thing about winter heating efficiencies. We talked a little bit about a statewide study that was done in 1989 to determine the extent to which Iowa could benefit from statewide energy efficiency programs. What that study did was establish a baseline for our efforts. If we go back and look at where we were then and compare with where we are today we may be able to gauge what kind of successes

we have had. At this point, we do not have another study to make a comparison. We also went back and looked at the total numbers that have been spent by IOUs, municipals and RECs over the years. You will see the percentages of money that was spent in all the different areas in the chart. One of the things I was trying to get a handle on was the total number of dollars of energy savings we were able to achieve. The aggregate amount of money that has been spent between 1990 and 1998 has been around $305 million. My guess is that energy savings numbers probably more than double that amount. The next point has to do with energy efficiency programs of the 1990 and where we spent most of our money. The residential sector and in the commercial/industrial sectors we spent about 17% of our efforts in load management and peak savings. We talked a little bit about what some of the predictions are. You see anything from 8-20% could be achieved. We talked about the nationwide study that was done several years ago that we prepared the Iowa case to that would substantiate some of those numbers. Iowa has as an energy intensity that is 13% higher than other states in the region and 16% of above that in the nation. Because of this, we may have a greater potential to save energy at lower cost than other areas of the region or country. On the reverse side, we listed some basic ideas. These are just some of our thoughts as we went through all the information. We are suggesting that we might want to consider initiating an energy efficiency and conservation assessment study. Something similar to what was done in 1989. This would give a snapshot in time and provide us with a number of things. It would help us measure the success of the programs of the 1990. It would help us clearly define what has been accomplished in the last 10 years. We hope to be able to evaluate the effectiveness of the low-income weatherization program. To see if that is an area that should be expanded. If we see a large gain in efficiency from this program, maybe we should put some more money into the program. We hope the study would reveal areas where additional efficiencies could be gained and at what kind of costs. This would give us an idea based on what we have done, what is left to do. It is very hard to tell if we have gotten all low cost efficiency out of the residential sector we can get and it is time to move on to something else? We need to identify areas where energy conservation is needed. By conservation, I mean the changing of the mindset of energy use. The idea of when you walk out of the room, shutting off the light switch. Something we may have all lost track of over the years because energy has been cheap. We tend to have to remind ourselves to do some of those things that we are not in the habit of doing. I think some effort in that area may probably be helpful. I think we need to take a hard look at the delivery mechanism for our current programs. That is through all the IOUs, municipals and RECs. Determine whether that is the best alternative or whether there is a better way of accomplishing more with the same amount of dollars. Some other states have gotten involved with separate agencies handling that sort of thing. I think a good look at the success and failures of some of those other programs would be good to try and identify sources of funding for future programs. I think that is an important thing that needs to be looked at. There are a variety of mechanisms for that I'm sure. We have only had experience with one and that is with the utilities selling the commodity. We feel that energy efficiency and conservation programs need to continue in the interim. Providing more focus on helping and encouraging the commercial and small business enterprises might be an area where some efficiency can be accomplished. We talked about modifying our current residential efficiency programs to concentrate on homes through the use of energy audits. This would indicate how inefficient a particular household might be and provide more effort to those residences that have high level of consumption opposed to those that do not. We think

that we need to initiate an energy conservation program to affect the mindset of people through a public awareness campaign. This would draw attention to the fact that we may be running out of energy in a few years and we may want to start thinking a little differently about how we consume energy. It could also be promoted as being good for the environment as well as the consumer. We might want to consider setting minimum efficiency standards for appliances. We might want to say that we really don't encourage selling 60% furnaces anymore. A lot of time a variety of appliances may be offered using efficiency as a selling point but it is not necessarily related to the cost of producing that product. Many times we are selling the idea rather than selling the actual cost of the commodity. If there wasn't a market for inefficient appliances and heating/cooling systems there more likely would be a lower costs for those systems than there may be today.

George VanDamme:
There used to be an Iowa Energy Code but there is no enforcement of it. The contractor can sign the paper regardless of what is put in. If there were some teeth on the Iowa Energy Code with regard to construction, that would be the most cost efficient place to make energy efficiency investments instead of replacing equipment that might have a reusable life. Do it up front. Then you could possibly have an income or property tax credit if you go above what the code requirements are.

Roger Amhof:
I am a big believer in incentives if we can figure out a way to get them in. Providing incentives to people with voluntary compliance is a lot more palatable to people then trying to force them with regulations.

Don Wiley:
When we think about the cost of the energy efficiency programs and we spent $305 million through the utilities you want to remember that is only a fraction of the cost that has been spent. Once the customer spends it, there is some rebate that comes back. There is more expenditure on that.

Roger Amhof:
Those dollars in the $305 million are only the dollars that have been spent through the utilities. We have no way of knowing how much people have spent on energy efficiency. I think we need to raise the public awareness to bring energy efficiency to the forefront so people realize that it is an issue.

Don Wiley:
We also have a wide variety of rebates that are offered. If you live where there is an IOU, you have one set; a municipality may have another set. There is no uniformity there. There is nothing that says a municipal has to offer anything. In many cases, they are not offering anything. For the first time this year I see people interested in energy efficiency regardless of whether there is a rebate or not. It isn't only incentive driven. There is a good energy audit that has to be filled out when a new residence is built. This gives you a certain standard along with many options to achieve that standard. To my knowledge that is something that has never done anything but sit in somebody's folder. I have never seen anyone enforce it, look at

it or check it out to see if it has been done. That is the greatest energy efficiency tool we have. It could be more than just a form. If you do it, it will save energy.

Kent McLaughlin:
I might add that this goes back to the first thing we talked about when we were collecting some data. Howard Shapiro said that you cannot build a school until you know how many students there will be. I feel that the Task Force thinks efficiency is going to have an impact with us grasping and trying to find the specific numbers on where the best use is going to be. We feel there may need to be a minimum investment since this a long-term type of a study to try and view where we can best focus on reducing the demand which is what was demonstrated to us from the very first meeting is the problem we are leading to. We feel that study could be the cornerstone of guiding us to what efficiency we need to implement. Our subcommittee was discussing this and in brief that was one thing that we focused on.

Lee Kohl:
I think you are right on point on evaluating the situation extensively and seeing where the most good can be done before you move forward. I would make a suggestion to the members of this Task Force to consider going out to the municipal utility headquarters. They had very specific goals when they constructed those headquarters on how they were going to use energy in that building. It serves as a really good model for what you can do with a little bit of planning and taking advantage of what is available out there right now. When George VanDamme talked about creating a minimum level by putting some teeth into the code but requiring some incentives, the first thing I think about is that facility. I start think about building facilities that way to do that I think there has to be some teeth in the code and there also has to be an incentive for someone to go above and beyond the basic requirements. I would recommend that the member of this Task Force go out and take a look at this facility, talk to Bob Haug about the energy savings that they have created in that facility.

Lana Ross:
It would be interesting to do that with some residential homes also.

Lee Kohl:
It would all be a part of the same mind set. I think you might find this goes to some of your bullet points such as identifying areas where conservation can help reduce the demand and determine methods to promote this conservation. New construction is one of the places where I think you are going to get the most value but only if there is code that has some teeth and some incentives that make people interested.

Kent McLaughlin:
One of the things we mentioned when we were discussing this study is that this study should have more representation from more than just DNR or utilities. It needs to be a broad based representation from everyone from the construction industry, utilities, state agencies and residential. There almost needs to be another Task Force to have the broader representation so that we can view all the facts. Everyone has the answer in their own realm. That is the benefit to having that study represented by various aspects of all efficiency, not just certain areas.

Lee Kohl:
I would like to ask the DNR about the $305 million. You have a percentage breakdown here of the $305. Could you tell me what falls under the miscellaneous? Do you have any idea of how much is going to administrative overhead?

Monica Stone:
I am going to defer that question to the Iowa Utilities Board staff. These are IUB's numbers.

Lee Kohl:
I don't need it right this minute. I would like to know at some point in time what is in the 9% miscellaneous and how much of these dollars is overhead administration.

Sharon Tahtinen:
I will talk to Gordon Dunn as he probably has all this broke down. I think he actually even talked about in his presentation a few meetings ago. I will talk to him and get it for you.

Lee Clancey:
Now we will hear from the Renewables & Environment subcommittee

John Sellers:
Our subcommittee is hoping to do a little more investigation with DNR and others regarding hydroelectric generation. From some the information that was mailed to Task Force members we feel that some things have not been addressed and some efficiencies of today have not been applied back to hydro as a potential. We look at the wind generators and wonder if something similar could be done with some of these old hydro facilities. Have there been some increases in technology that could bring these back on line for the communities? We will be getting back with DNR about some known issues that were stopping this development. We would like to look at this angle a little more deeply.

We also talked about a small facility with 100% biomass generation and looking at customer-owned and cooperative entities that would get involved in this type of generation. Looking into how many rules and hurdles would be in their way for a group to go together and build a small plant to supply all the electricity, heating and cooling needed for a specific project, like the destination park at Rathbun Lake. This is just a theory type situation. What if farmers were able to stick a biomass facility beside their ethanol plant and take the crop residues to produce

energy? How many obstacles are going to be thrust at them by the Iowa Utilities Board, DNR and other agencies involved before they can get into the generation business?

We are looking at establishing a standard system for net metering and connecting renewable energy generators to the transmission system. Establish a fair cost for transmitting electricity generated by renewable sources. Promoting investment into integrated small-scale renewable energy systems. We still feel that increasing the amount of energy generated from renewable or alternative sources should be raised from 2% to 20%. If the argument can be used that coal from Wyoming can generate added value to the state of Iowa, we feel that something grown in Iowa can still generate economic activity. This would give more validity to the wind and biomass. We feel like up to 20% would be a reasonable level in the future for a renewable portfolio standard. I think we could get the numbers from DNR as to what it would cost to increase renewable energy an extra 10%, including what it is going to cost the residential, commercial and the agricultural business. We like to see some numbers as to what it would cost to raise that standard up to 20%.

George VanDamme:
I would like you to entertain one other thing. I think all utilities have the option of the customer to buy green power. In other states people pay a premium for it. Right now you can't do it but I don't know the Iowa Utilities Board and legislature can order anyone to give that as an option.

Roger Amhof:
Alliant has a pilot program where they will sell blocks of green power at an additional cost to their consumers. I believe the program is called Second Nature. It allows consumers to participate and agree to pay more in order to do that.

Lee Clancey:
There is an area we have not talked about at all. That is the ability to use municipal solid waste in some kind of generating capacity. There are some serious obstacles to that. The least of which are the up-front capital costs to build that kind of a facility for any municipality. In our case at Cedar Rapids, we are faced with the siting of a new landfill or transfer station because our landfills are full. We also have some conflicting state policies with regard to municipal solid waste and recycling that if we were to build something like this, the material that is most likely to be able to generate the kind of heat that you need is also the most recyclable. It does not count toward your 50% reduction if you burn it as opposed to recycling it. There are some conflicting state policies that would be difficult to overcome. There are also environmental concerns. There is no resource more renewable than solid waste. It does not go away, it just accumulates. I would like your subcommittee to consider that option.

John Sellers:
That goes right along with agricultural and what they are doing at the Iowa Energy Center on the co-generation of gas using methane. I don't see that much difference between the two other than there are a few more heavy metals off the municipal side than you do on the agricultural side.

Lee Clancey:

Those can be separated out. The biggest barriers are the initial capital cost and the fact that it doesn't count toward your 50% reduction if you end up burning those things that are most likely to create the kind of heat that you need for energy, like cardboard, paper and plastics. If you chose to burn it as opposed to recycling it, it doesn't count at all.

Let's go on to the Transmission/Infrastructure/Regulations and Relationships subcommittee.

Don Wiley:
Our subcommittee met last Thursday with representatives from MidAmerican Energy in Cedar Rapids. We are probably looking at and coming to grips with is; what is our transmission now and how is it planned? How does it relate to generation? The fact that it has been planned in the past for individual utilities and what they saw would affect their generation and transport their generation. How we are looking at a for-profit perspective in planning, building and transmission. And looking at it from a public point of view. Transmission is not keeping up with generation. Part of that problem is the increase in power marketers.

MidAmerican expects transmission growth to be 20% of what generation growth is. That will not work. They look at it only in the context of where the generation is going to occur. Once they see the generation is needed, generation is planned; generation is feasible then they look at how they are going to get the transmission to it. From a profit point of view, they are not going to look at running transmission lines, what would it take to engineer transmission lines in the northwest to take care of future generation from wind. That is not why they are hired to do their job. At this point, that is who is engineering our transmission system is the IOUs. It looks like there is a potential for public input as to what the transmission is for the state. Then we must consider the surrounding states. FERC is doing something that we need to support. Through their orders of 888, which relates to open transmission to third parties, and their order of 2000 which is the operation and the management of the grid would be by someone other than the owner. We are talking about RTOs or ISOs. MidAmerican has approached it with a different plan. They have done this through an Independent Transmission Company (ITC). It would still look at it in terms of return on the dollar so that we are simply not just generating plans that have no relationship to efficiency. I think we are seeing an outdated system. We are asking and have asked independent private for profit groups to build transmission and now we want to use them for different purposes then what they were originally intended, we haven't got the system put together in order to do that.

The Not-In-My-Backyard syndrome is a big problem. In Mt. Pleasant we have a municipal and an REC arguing over the construction of 2 transmission lines proposed in 1995. The case is in the Supreme Court today. One line is .6 miles the other is .9. These two small agencies cannot come to an agreement within this small area. Our municipal utility is trying to increase generation so that they can offset about $1 million to the local area in peak periods and they are now on their second offering of where to put the line. Even in this small town, nobody wants the line in their neighborhood. They don't argue when it goes across town, but there is a problem when it is located in their neighborhood.

Lee Clancey:

The transmission lines were designed to go where the generation plant wanted them to go. We have a system that was not designed to do the kind of things we are expecting it to do. Power marketers are using this system for long haul purposes when it was designed for short haul purposes. It used to be that you made an investment in a generation plant then build the transmission lines to where you wanted it to go. That's how it would work. Today generation plants are being built close enough to existing transmission lines to put their power up on existing transmission lines. No new transmission lines are being built. Consequently, that is where we see a 20.7% growth in demand with only a 4.2% growth in transmission expansion. There are a couple of basic recommendations we are looking at. There has got to be more and better regional coordination and planning with state participation for the transmission system. Particularly to those areas that are under-served. We have also got to do something to make siting new transmission lines less complicated. I think we have some pretty good rules in place for siting but we need to make sure that we can create the type of transmission system in this state that will not only be good for the citizens of this state but will also allow us to get power from other places as well. We will be working on further policy statements for the next meeting.

Lee Kohl:
I think the key here is that the system was not developed for the uses it currently has. The IOUs don't have a responsibility to go out, develop, and manage a system that interconnects with the grid. That was not their purpose. They were supposed to serve a customer base and they worked to serve that customer base. Now you are asking the system to do entirely different things and it is not appropriate to look at the utilities and say, hey you didn't hook up the system and plan it that way. We are having a dramatic change in the paradigm and we have to decide; how we are going to move forward, how we are going to pay for it, how we are going to interconnect, what kind of rules there will be and whether it will be on a state, regional or national level. Unless this is resolved, we are going to keep running into this problem.

John Sellers:
Have we addressed any new technologies in transmission? It seems this state of the art has been static for many years. I am seeing the same basic methodology in everything. Is there anything that would help efficiency to get these electrons from point A to point B?

Lee Kohl:
I have contacted a few people who have done some studies on line loss and technology changes. They will be sending me some information regarding this.

John Sellers:
If there were some new technologies out there, it might not be so bad if we could encase it underground to stop the Not-In-My-Backyard attitude. If we had some shifts in the paradigm, maybe it would solve some of those issues.

Lee Kohl:
With distribution that is very possible. With major transmission it is not that easy.

Roger Amhof:

The issue of the transmission system being used for things they were never designed for was one of the biggest issues addressed in the micropower booklet that David Hurd sent to us. The idea of distributed generation will definitely have an impact on that. When you compare the cost of providing this type of interconnection you are talking about, does it make distributed generation more affordable?

Lee Kohl:
I think that is a good point, but don't over simplify that. When talking with the engineers we learned that there were places you could put power on line and you would worsen the constraints on the transmission system by having more energy in a particular place. The electron flow in the grid is a moving target. The way the electrons are moving today are not the way the electrons were moving just 18 months ago because of changes in the market. The California situation has actually created changes in the East Coast market. Those are changes in the electron flows so the constraints are also moving. So, if you fix one constraint, you may create a constraint in two other places.

Kent McLaughlin:
Do you have any reports on the Midwest Governor's Conference?

David Hurd:
The only thing that I have is that each state was to appoint an energy liaison to that Governor's group.

Lee Kohl:
They have decided to form a National Governor's Energy Task Force grouping from the Governor's conference. I have not heard any other specifics.

Lee Clancey:
We will have some information regarding the bill coming from our support staff sometime in the next week or so. We will have people at the April 3 meeting to discuss this bill. We will also start discussion of policy statements that are coming out of the subcommittees.

David Hurd:
I would hope that each of our subcommittees would come back with some suggested policy statement recommendations that they think should be adopted by the Task Force. This does not have to be a final presentation of all the recommendation points. Just whatever recommendations your subcommittee agrees on that they think should be policy. Then we can see if we can adopt them as a Task Force.

Lee Clancey:
I think we need to come prepared to discuss these recommendations. We need to have a thorough discussion about these recommendations. I don't think any of us want recommendations coming from this Task Force that have not been looked at from all sides.

Lisa Davis-Cook:
If the subcommittees have their recommendations ready before the April 3 meeting, please circulate them to the other Task Force members.

TASK FORCE DISCUSSION FOR SCHEDULING NEXT MEETING:
April 3, 12:00 – 4:00 p.m. – Iowa Utilities Board, 350 Maple St, Des Moines
May 1, 10:00 a.m. – 2:00 p.m. – Iowa Association of Municipal Utilities Office

MEETING ADJOURNED 3:15 PM